Chapter 1 Chapter 3 REQUIREMENTS TO CAPABILITIES 39 MEETING THE CHALLENGE: SHAPING THE FUTURE 1 Department of Defense Acquisition 40 Seapower 21 2 Figure 8: DoDI.5000.2 The New DoD 5000 Model 40 The Fleet Response Plan 3 Navy Department Acquisition 43 The "1,000-ship" Navy 5 Building A Fleet For The Future 6 SEA STRIKE 44 Long-term Shipbuilding Plan 6 Platforms 44 Ashore Vision 7 Aircraft 44 Aviation Roadmap 9 AH-1Z Super Cobra and UH-1Y Huey Upgrade 44 Developing 21st Century Leaders 10 AV-8B Harrier II+ 45 Strategy For Our People E-6 Mercury Airborne Command Post/ 11 TACAMO Aircraft 46 Sea Warrior 12 EA-6B Prowler Airborne Electronic Attack Aircraft 46 Diversity 13 EA-18G Airborne Electronic Attack Aircraft 47 Our Challenging Mission... F/A-18 A-D Hornet Strike-Fighter Aircraft 47 A Vision Of Peace... A Reality Of Power 14 F/A-18E/F Super Hornet Strike-Fighter Aircraft 48 F-35 JSF Joint Strike Fighter 49 Chapter 2 UCAS Unmanned Combat Air System 50 BRIDGING VISION AND PROGRAM DECISIONS 15 VH-71A Presidential Helicopter Replacement 51 Navy Program Assessment and Planning 16 Surface and Expeditionary Warfare Ships and Craft 52 Aircraft Carriers 52 Planning and Programming 16 CVN 68 Nimitz and CVN 21 Program 52 Independent Capability Analysis and Assessment 17 Submarines 53 Warfare Capability Analysis 18 ASDS Advanced SEAL Delivery System 53 Sea Strike 19 SSGN Nuclear-Powered Guided-Missile Submarine 54 Sea Shield 20 55 Sensors 21 Sea Basing Airborne 55 **FORCEnet** 22 APG-79 Active Electronically Scanned Array Warfare Support Analysis 22 (AESA) Radar System 55 ASQ-228 ATFLIR Advanced Targeting Infrastructure 22 Forward-Looking Infra-Red 56 Manpower and Personnel 24 ASD-12V SHARP Shared Reconnaissance Pod 56 Readiness 24 Subsurface 57 Training and Education 25 BYG-1 Submarine Combat Control System 57 Naval Capabilities Development Process 25 Weapons 57 Navy Program Implementation 26 57 Airborne Quality of Service 26 AGM-88E AARGM Advanced Anti-Radiation Guided Missile 57 Quality of Work 27 AGM-154 JSOW Joint Standoff Weapon 58 Quality of Life 27 AIM-9X Sidewinder Short-Range Air-to-Air Missile 59 Force Readiness 27 AIM-120 AMRAAM Advanced Medium-Range Figure 1: U.S. Navy Force Structure and Endstrength 28 59 Air-to-Air Missile Figure 2: Aircraft Carrier Build Schedule 29 GBU-10/12/16/24 LGB Laser-Guided Bomb 60 Figure 3: Attack, Guided Missile, GBU-31/32/38 JDAM Joint Direct Attack Munition 61 **Ballistic Missile Submarines** 31 Subsurface, Surface, and Expeditionary 61 Figure 4: Surface Warship Projections 32 AGS Advanced Gun System 61 Figure 5: Amphibious Ship Projections Tactical Tomahawk Weapon Control System (TTWCS) 33 BGM-109/UGM-109 Tomahawk Current Readiness 33 Land-Attack Missile (TLAM) 63 Future Readiness 35 Electromagnetic Railgun 64 Figure 6: FY 2006-2011 Aircraft Procurement Plan 36 ERM Extended-Range Munition 64 Figure 7: FY 2006-2011 Shipbuilding Plan 37 MK-45 Mod 4 Upgrade Five-Inch/ **Investing in Future Readiness** 37 62-Caliber Gun System Upgrade 65 Meeting Today's and Tomorrow's Needs NFCS Naval Fires Control System 38 66

SEA SHIELD Platforms	67 67
Aircraft	67
Broad Area Maritime Surveillance [BAMS]	
Unmanned Aerial System [UAS]	67
MH-60R/S Seahawk Multi-Mission	
Combat Helicopters	68
MQ-8B Fire Scout Vertical Takeoff	
and Landing Tactical UAV (VTUAV)	68
P-8A MMA Multi-Mission Maritime Aircraft	69
P-3C Orion Modification, Improvement,	
and Sustainment	70
S-3B Viking Sustainment Program	71
Submarines	71
SSN 774 Virginia Class Nuclear-Powered	
Attack Submarine	71
Surface and Expeditionary Warfare Ships and Craft	73
CG 47 Ticonderoga Class Aegis Guided-Missile Cruiser Modernization	72
CG(X) 21st Century Cruiser	73 74
DDG 51 Arleigh Burke Class	/4
Aegis Guided-Missile Destroyer	74
DD(X) 21st Century Destroyer	75
FFG 7 Oliver Hazard Perry Class	,,,
Guided-Missile Frigate Modernization	76
LCS Littoral Combat Ship	77
MCM 1 Avenger-Class Mine Countermeasures	
Ship Modernization	78
Veapons	78
Airborne	78
AMNS Airborne Mine Neutralization System	78
RAMICS Rapid Airborne Mine Clearance System	79
Subsurface, Surface, and Expeditionary	79
ABS Assault Breaching Systems	79
Aerial Targets	80
LHT Lightweight Hybrid Torpedo	81
MK-15 Phalanx Close-In Weapon System (CIWS)	82
MK-48 Advanced Capability (ADCAP) Torpedo	82
Navy Ballistic Missile Defense (BMD)	84
Naval Mines Quickstrike Mines	85
RIM-7, RIM-162 NATO Sea Sparrow Missile (NSSMS)	
and Evolved Sea Sparrow Missile (ESSM)	85
RIM-66C SM-2 Standard Missile-2 Blocks III/IIIA/IIIB	89
RIM-116A RAM Rolling Airframe Missile	87
SM-6 Extended-Range Active Missile (ERAM) Block I/II	88
SLBM UGM-133A Trident II/D5 Submarine	
Launched Ballistic Missile	89
Stabilized 25-mm Chain Gun	89
ensors	90
Airborne	90
AAR-47 MAWS Missile Approach Warning System	90
ALR-67(V)3 Advanced Special Receiver	91
ALQ-214 IDECM Integrated Defensive	
Electronic Counter-Measures	91
Naval Aviation Improved Chemical, Biological,	
Radiological Nuclear Defense CBRND	91
Subsurface	92
BQQ-10 ARCI Acoustic Rapid COTS Insertion	92

Fixed Distributed System-COTS	93
UUV Unmanned Undersea Vehicles	94
Surface, Subsurface and Expeditionary	96
AADC Area Air Defense Commander	96
ADS Advanced Deployable System	97
ALMDS Airborne Laser Mine Detection System	98
AQS-20A Mine-Hunting Sonar	99
Nulka Radar Decoy System	99
OASIS Organic Airborne and Surface Influence Sweep	100
Shipboard Protection System (SPS) Integrated Radar/	
Optical Sighting and Surveillance System (IROS3)	100
Solid-State SPY Radar Next-generation S-Band,	
Theater Air & Missile Defense, Multi-function	
Advanced Active Phased-Array Radar	101
SPQ-9B Radar Anti-Ship Cruise Missile	
(ASCM) Radar Improvement Program	101
SPY-1 Aegis Multi-function Phased-Array Radar	102
SPY-3 MFR Multi-Function Radar	102
SQQ-89 Anti-Submarine Warfare (ASW)	
Combat System	103
SSDS Ship-Self Defense System	104
Surface Electronic Warfare Improvement	
Program (SEWIP) Block 1 Upgrade	105
SSTD Surface Ship Torpedo Defense	106
TCS Tactical Control System	107
UQQ-2 SURTASS/Low Frequency Active (LFA)	108
UQQ-2 SURTASS	
Surveillance Towed Array Sensor System	109
S-Band Volume Search Radar (VSR)	110
C D	
SEA BASE	111
Platforms	111
Aircraft	111
C-37 Executive Transport	111
C-40A Clipper	112
CH-53X HLR Heavy Lift Replacement	113
KC-130J Hercules Tactical Tanker and Transport	114
MV-22 Osprey Joint Advanced Vertical Aircraft	115
Surface and Expeditionary Warfare Ships and Craft	116
LHA(R) General Purpose Amphibious Assault Ship	
(Replacement)	116
Joint High Speed Vessel (JHSV)	117
LCAC Landing Craft, Air Cushion	118
LCAC (X) Seabase to Shore Connector,	
LCAC Replacement	119
LHD Wasp-Class Amphibious Assault Ship	119
LPD 17 San Antonio-Class	1.00
Amphibious Transport Dock Ship	120
MPF(F) Maritime Prepositioning Force (Future)	122
Equipment and Material	123
COLDS Cargo Offload and Discharge System	123
NMCB TOAs Naval Mobile Construction	
Battalion Tables of Allowance	124

Table of Contents - Sea Power for a New Cra

Submarine Escape and Rescue	125
Survivability	125
Escape (SEIE)	125
Rescue (DSRV, SRC, SRDRS)	126
FORGE	
FORCENET	127
Joint Service/Navy-Wide Systems	127
Architectures and Standards	127
ADNS Automated Digital Network System	129
ATDLS Advanced Tactical Data Link Systems	130
BLII Base Level Information Infrastructure	130
C2P Command and Control Processor	132
CDLMS Common Data Link Management System	132
CLIP Common Link Integration Processing	133
CENTRIXS-M Combined Enterprise Regional Information Exchange System Maritime	134
CWSP Commercial Satellite Communications: Commercial Wideband SATCOM Program	135
DCGS-N Distributed Common Ground/Surface System Navy	135
DJC2 Deployable Joint Command and Control Capability	136
DoD Teleport	137
DMS Defense Messaging System	138
DNM Dynamic Network Management	138
GBS Global Broadcast Service	139
GCCS-M Global Command and Control System-Maritime	140
IA Information Assurance	141
IBS/JTT Integrated Broadcast Service/Joint Tactical Terminal	142
ISNS Integrated Shipboard Network System	143
Joint Interface Control Officer (JICO) Support System (JSS)	144
JTIDS Joint Tactical Information Distribution System	144
JTRS Joint Tactical Radio System	145
Lightweight Super High Frequency Satellite Communications	146
Mark XIIA Mode 5 Identification Friend or Foe (IFF)	147
MIDS-JTRS Multi-functional Information	
Distribution System Joint Tactical Radio System	147
MIDS-LVT Multi-functional Information	
Distribution System	147
MUOS Mobile User Objective System	148
NATO Improved Link-11	149
NAVSTAR Global Positioning System (GPS)	150
Navy EHF/AEHF Extremely High Frequency	
Satellite Communications (SATCOM)	150
Navy METOC Sensors (Space) Meteorological/ Oceanographic Sensors	152
NMCI Navy Marine Corps Intranet	153
NTCSS Naval Tactical Command Support System	153
Tactical Switching	154
TIS Trusted Information Systems	155
UFO UHF Satellite Communications Follow-On	156
USW-DSS Undersea Warfare-Decision Support System	157
WEN Web Enabling	158
Airborne Systems	159
ACS Aerial Common Sensor	159
E-2 Hawkeye Airborne Early Warning Aircraft Upgrade	160
EP-3E Modification and Sustainment	161
NAVMPS Naval Mission Planning Systems	162

Submarine Systems	163
CSRR Common Submarine Radio Room	163
HDR Submarine High Data-Rate Antenna	164
SubLAN Submarine Local Area Network	164
Surface and Expeditionary Systems	165
ACDS Advanced Combat Direction System	165
CDLS Communications Data Link System	165
CEC Cooperative Engagement Capability	166
SCI Networks	167
SSEE Ship Signal Exploitation Equipment Increment E	168
SEA WARRIOR	169
Total Force Management	169
Integrated Learning Environment	170
Manning Next-Generation Warships	171
Seaprint	172
Recruiting	172
Retention	174
CCD Center for Career Development	174
Selective Reenlistment Bonus	175
The Navy Reserve	175
Quality of Service	175
Deployed Recreation	176
Family Support	176
Key Sea Warrior Programs	176
CNATRA Naval Aviation Training Aircraft	176
EMPRS Electronic Military Personnel Record System	178
Chapter 4	
FISCAL OUTLOOK	179
Navy Resources	180
Figure 9: Total Obligation Authority FY 1992-2011	180
Transforming for the Right Readiness at the Right Cost	180
Shaping the Navy's Workforce	181
Figure 10: Force Structure Trends	181
Bridging to the Future through Investment in Sea Power 21	181
Navy Appropriations	182
Figure 11: FY 2005 DoN Budget Request by Appropriation	182
Figure 12: Navy Procurement Trend, 1990-2011	182
Seapower for a New Era	182
010	
Appendix A	
Navy-Marine Corps Crisis—Response and Combat Actions	183
Appendix B	
Glossary	192
Appendix C	
Index of Programs	201